

REMARKS

This is in response to the Office Action (non-final) mailed February 9, 2005. Claims 1-28 remain pending. All 28 claims have been rejected. Claims 1, 3-15, 18-25 and 28 have been amended. Applicants respectfully request reconsideration and removal of the rejections in view of the amendments and the arguments made herein this response.

The Examiner has objected to Claims 3, 10, and 20 for informalities which have been corrected by amendments to these claims. Removal of this objection is respectfully requested.

The Examiner has rejected Claims 1-16, 18-26 and 28 under 35 USC 102(e) for alleged anticipation by U.S. Patent 6,449,647 to Colby et al. (Colby). In order for such a rejection to be warranted, each element claimed by Applicants must be present in the prior art reference. Here, as is pointed out below, each element is not disclosed, so Applicants respectfully submit that the rejection should be removed and the pending claims allowed.

Applicants' specified invention in amended Claim 1 is a method for managing network resources for copying data stored on a first data storage system to a second data storage system. Each data storage system includes an array of data storage devices on which data involved in the copying is stored. The method comprises certain computer-executed steps. The steps include requesting from a server for services on an internet network, and a bandwidth for data copying from a first data storage system to a second data storage system over the internet network based on the amount of data to be copied. Then the steps specify copying data in response to a bandwidth allocation from the server based on the request, and monitoring internet network

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traffic characteristics during the data copying; and then responsive to the monitored internet network traffic characteristics, selectively requesting an effect on bandwidth allocation.

In contrast Colby does not reference copying of data from a first data storage system to a second data storage system. Colby is not directed towards copying of data. Instead Colby is directed to a content-aware flow switch that intercepts a client content request in an IP network and transparently directs the content to a best-fit server based on type of content request, the degree of load on available servers, network congestion information and the proximity of client to available servers. Applicants' claimed invention is directed to allocating bandwidth and copying from one data storage system having data storage devices on which data is to be copied to another while monitoring traffic. Colby does not disclose the specified steps in Applicant's Claim 1 for the management of resources for copying from a first to a second data storage system because it is directed to switching mechanisms in an IP network which is related to a completely different type of problem being solved.

Applicants respectfully assert that independent Claim 10 is not anticipated by Colby and removal of the 102 rejection is respectfully requested to be removed. Since Claims 2-16 depend on Claim 1 and inherit all of the limitations of Claim 1, then these claims should also be allowed and the 102 rejection removed.

Claims 18-26 specify a system that includes the first and second data storage system for which copying is specified and for which network resources are managed in a similar manner to Claim 1. For the same reasons that Claim 1 are allowable because specified elements are not disclosed by Colby, these Claims 18-26 are believed to be allowable. Removal of the 102 rejection of these claims is hereby respectfully requested.

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Claim 28 also includes the specified method steps of Claim 1 which are not disclosed by Colby and therefore Applicants believe the anticipation rejection of this claim is unwarranted. Applicants respectfully request allowance of Claim 28.

The Examiner has also rejected Claims 17 and 27 under 35 USC 103(a) as being unpatentable over Colby and in view of US Patent 6,028,841 to Lyon et al. (Lyon). Claim 17 which depends on Claim 1, and Claim 27, which depends on Claim 18 include the method steps related to copying and the first and second data storage system which is not disclosed nor taught or suggested by Colby. Claim 17 also specifies a replication policy that defines replication groups for data storage devices involved in data replication from the first to the second data storage system and the data replication is completed when all devices in the replication groups are synchronized. Claim 27 includes a similar provision. The Examiner has asserted that these limitations are taught or suggested by Lyon at Col. 6, Lines 7-15 of the Lyon reference. But there is no mention of data replication at all at those locations. Instead there is a discussion in Lyon at that point regarding operation of throttles across devices, which are not data storage devices to synchronize such throttles. In contrast, Applicants' synchronization is of the data so it is identical on the first data storage system and the second data storage system because it is the data which is replicated. The Examiner asserts there is a motivation to combine Lyon's teaching of synchronization of throttling with Colby to achieve control functions seeing identical stimuli. But such seeing of identical stimuli is completely unrelated to Applicants' invention of replicating data. There is no motivation to combine, and even if the references are combined, Applicants' invention is not yielded.

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For the reasons given above, Applicants respectfully assert that the obviousness rejection of Claims 17 and 27 is unwarranted. Removal of this rejection and allowance of Claims 17 and 27 is respectfully requested.

In view of the foregoing, the Applicants believe that the application is in condition for allowance and respectfully request favorable reconsideration.

In the event the Examiner deems personal contact desirable in the disposition of this case, the Examiner is invited to call the undersigned attorney at (508) 293-6985.

Please charge all fees occasioned by this submission to Deposit Account No. 05-0889.

Respectfully submitted,

Dated: _____

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